

CLIPPEDIMAGE= JP360077429A

PAT-NO: JP360077429A

DOCUMENT-IDENTIFIER: JP 60077429 A

TITLE: DRY ETCHING METHOD

PUBN-DATE: May 2, 1985

INVENTOR-INFORMATION:

NAME

SEGAMI, MAKOTO

TERASE, KUNIHICO

IIDA, SHINYA

KOMATSU, HIDEO

ASSIGNEE-INFORMATION:

NAME

ASAHI GLASS CO LTD

KOKUSAI ELECTRIC CO LTD

COUNTRY

N/A

N/A

APPL-NO: JP58184399

APPL-DATE: October 4, 1983

INT-CL (IPC): H01L021/302;C09K013/08

US-CL-CURRENT: 438/714,438/FOR.117

ABSTRACT:

PURPOSE: To prevent or remove the etching residue or produced polysilicon and to suppress the etching of a semiconductor material by etching the semiconductor material with gas which contains at least C, F, O and compounds simultaneously contained as indispensable components.

CONSTITUTION: Perfluoroepoxides such as CF<SB>2</SB>CF<SB>2</SB>O or perfluoro cyclic ethers such as CF<SB>2</SB>CF<SB>2</SB>CH<SB>2</SB> is suitable gas, and a mixture of two or more gases containing mainly solely any of them or

hexafluoropropylene oxide is employed. When trifluoromethane is mixed at the etching time of  $\text{SiO}_2$ , PSG for these compounds, the formation of polymer can be particularly suppressed while holding the selectivity of the primary Si and a photoresist, and when  $\text{Cl}_2$  is mixed at the etching time of the polysilicon or metallic film, the etching of high selectivity can be performed at a high speed, and when suitable amount is mixed with hexafluoropropylene oxide, it is similarly effective.

COPYRIGHT: (C)1985,JPO&Japio